

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 30 October 2003 (30.10.2003)

PCT

(10) International Publication Number WO 03/089160 A1

(51) International Patent Classification⁷: **B21B 27/08**, B22D 11/128, F27D 3/02

(21) International Application Number: PCT/GB03/01641

(22) International Filing Date: 16 April 2003 (16.04.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 0208639.5

16 April 2002 (16.04.2002) GB

(71) Applicant (for all designated States except US):
BARTLETT ENGINEERING (SOUTH WALES)
LIMITED [GB/GB]; Llewellyns Quay, Port Talbot
Docks, Port Talbot SA13 1RF (GB).

(72) Inventors; and

(75) Inventors/Applicants (for US only): BARTLETT, Michael, Charles, Richard [GB/GB]; Old Castle Farm, Fairyland Road, Tonna, Neath SA11 3QB (GB). COR-CORAN, Steven, Phillip [GB/GB]; 22 Great Close, Crowood, Yorkshire YO8 3UG (GB).

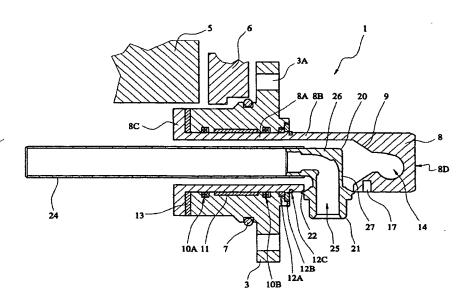
- (74) Agent: DAVIES, Gregory, Mark; Urquhart-Dykes & Lord, Alexandra House, 1 Alexandra Road, Swansea SA1 5ED (GB).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: ARRANGEMENT FOR COOLING A ROLL



(57) Abstract: The present invention discloses an arrangement for cooling a roll (5). The arrangement comprises a housing (2) to be secured to the roll (5), a hollow shaft (8) mounted for rotational movement within the housing (2) and a cooling medium line to convey cooling medium into the roll (5) via the interior of the shaft (8). The cooling medium line comprising an inlet communicating with an elbow portion, a first length (27) of the elbow portion (20) extending from the inlet substantially perpendicular to the axis of the shaft and a second length (26) of the elbow portion extending from the first length in the direction of the axis of the shaft (8), the axes of the first and second lengths being in substantially the same plane.

VO 03/089160 A